

## Faculti Summary

<https://faculti.net/cranberry-supplementation-improves-physiological-markers-of-performance-in-trained-runners/>

This video discusses a study on the effects of cranberry supplementation on athletic performance, particularly in trained endurance athletes. The speaker mentions the significance of minimal improvements that can drastically affect competition outcomes, leading athletes to explore changes in training, diet, or supplements for enhancements.

The initial research involved rodents, revealing that cranberry supplementation resulted in a notable increase in running capacity, which prompted further investigation into its effects on humans. Cranberries are highlighted for their antioxidant properties and high polyphenol content, specifically a type called proanthocyanidin, which helps mitigate tissue damage caused by reactive oxygen species during intense exercise, thus aiding recovery.

The human study included 14 elite runners who underwent testing over three visits: a baseline assessment, an acute dose trial, and a chronic supplementation trial lasting 28 days. The athletes performed 400m and 1500m time trials to assess both anaerobic and aerobic energy systems.

Key findings indicated that chronic cranberry supplementation improved aerobic performance, with participants showing a 1.5% improvement in running times during the 1500m trial. The study suggests that the supplement enhances muscle oxygenation and recovery, creating potential for athletes to train harder and longer.

In contrast, results for the 400m trial did not show significant improvements; however, some buffering effects on lactate production were observed. Overall, the research concludes that cranberry supplementation provides an ergogenic benefit, particularly for aerobic performance, helping athletes gain a competitive edge without the use of synthetic substances.